

Work Order ID 61324

Wednesday, August 18, 2010 9:06:32 AM



SHIP TODAY Page 1

Item ID: D350-607-241

Accept



Setup Start



Revision ID:

Item Name: Basket Clamp Assembly

Stop



Start Date: 8/18/2010 Start Qty: 2.00



Cust Item ID:

Required Date: 8/18/2010 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: mk Date: 10-8-18

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr	Revision Nbr
D350-607-1	A

100

0.00



DC

Document Control

Memo

0.00

Photocopy blueprint & type labels per PPP D350-607-241
CHG001

2 2 paper work in 1 hr so 103000

10/8/18 CL 10-8-18

110

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

10/8/18 SL (2x)

120

QC4- 100% Inspect kits for completeness

0.00



QC

Quality Control

Memo

0.00

2 100818

Placed in shipping bag-
D.O. exploded qty's : OSI'S.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 61324

Wednesday, August 18, 2010 9:06:32 AM



Page 2

Item ID: D350-607-241

Accept



Setup Start



Revision ID:

Stop



Item Name: Basket Clamp Assembly

Start Date: 8/18/2010 Start Qty: 2.00



Cust Item ID:

Required Date: 8/18/2010 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 	Packaging	0.00							
	Packaging								
	Memo	0.00							
	Identify and pack for shipping as per PPP D350-607-241								
	Location: _____								
	PPP rev: <u>A</u> <u>3 SO 103000</u>								
140 	QC21- Final Inspection - Work Order Release	0.00							
	QC								
	Quality Control								
	Memo	0.00							

10/18/10 SP



10/08/18

CZ10/8/18

Picklist Print

Wednesday, August 18, 2010 9:06:31 AM

Page 1

Work Order ID: 61324

Parent Item: D350-607-241

Parent Item Name: Basket Clamp Assembly

Start Date: 8/18/2010

Required Date: 8/18/2010

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP RevA: New issue DD verified by:EC
per ECN10-545 DD 10.04.16 verified by:EC

IPP Rev:B as

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2230-1



Lug

Manufactured

No

110

Each

59.0000

4

8
10/8/10 SP

Location

Loc Qty

Loc Code

ST476

59

60289

59

D2230-3



Lug

Manufactured

No

110

Each

77.0000

4

8
10/8/10 SP

Location

Loc Qty

Loc Code

ST476

77

55452

2

59418

8

60191

67

D2324



Strut

Manufactured

No

110

Each

8.0000

1

8
2
10/8/10 SP

Location

Loc Qty

Loc Code

ST511

8

59665

8

D2732



Rubber Extrusion

Manufactured

No

110

f

284.9310

2

4
10/8/10 SP

Location

Loc Qty

Loc Code

ST412

284.931

56516

284.931

1- cut qty (8) 3.00" long per dwg D2732-030

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Wednesday, August 18, 2010 9:06:31 AM

Page 2

Work Order ID: 61324

Parent Item: D350-607-241

Parent Item Name: Basket Clamp Assembly

Start Date: 8/18/2010

Required Date: 8/18/2010

Start Qty: 2.00

Required Qty: 2.00

AN4-12A

Purchased

No

110

Each

329.0000

1

2

Bolt

Location

Loc Qty

Loc Code

ST357

329

112314

129

115371

40

115422

160

AN4-15A

Purchased

No

110

Each

449.0000

12

24

Bolt

Location

Loc Qty

Loc Code

ST

112

115374

112

ST338

112

ST358

337

114784

21

115108

216

115371

100

NAS1149D0463J

Purchased

No

110

Each

2,006.000

26

52

Washer

Location

Loc Qty

Loc Code

ST297

1910

115000

1910

ST298

96

10096

10

114576

68

114883

18

Wednesday, August 18, 2010 9:06:31 AM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Wednesday, August 18, 2010 9:06:31 AM

Page 3

Work Order ID: 61324

Parent Item: D350-607-241

Parent Item Name: Basket Clamp Assembly



Start Date: 8/18/2010

Required Date: 8/18/2010

Start Qty: 2.00

Required Qty: 2.00

J MS21042L4
Nut

Purchased

No

110

Each

2,999.000



13

26

robles

22

Location

Loc Qty

Loc Code

ST300

2999

113422

68

114523

28

114718

16

114784

967

115108

1920

Sp

Wednesday, August 18, 2010 9:06:32 AM

Shop Packet Print

Page 3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

6.0 PARTS LIST

6.1 D350-607-041/-041A/-043/-043A HELI-UTILITY-BASKET™

Qty -041	Qty -041A	Qty -043	Qty -043A	Qty -241	Part Number	Description
X					D350-607-041	HELI-UTILITY-BASKET
	X				D350-607-041A	HELI-UTILITY-BASKET
		X			D350-607-043	HELI-UTILITY-BASKET
			X		D350-607-043A	HELI-UTILITY-BASKET
1	1	1	1	X	D350-607-241	BASKET CLAMP KIT INSTALLATION
2	2	5	5		D2022-101	SPACER
1	1	1	1		D2221	BASKET BASE ASSEMBLY
				4 ✓	D2230-1	LUG
				4 ✓	D2230-3	CLAMP
1	1	1	1		D2258-200	LABEL
1	1	1	1	DS1	D2324	STRUT
1		1			D2332-041	PROP ASSEMBLY
1	1				D2512	BASKET LID ASSEMBLY
1	1	1	1		D2530	HANDLE WELDMENT
2	2	2	2		D2535	SPRING
2	2	2	2		D2537	BUSHING
				8 ✓	D2732-030	RUBBER CUSHION
2	2	2	2		D2931	BUMPER
		1	1		D2989-041	BASKET LID ASSEMBLY (OUTSIDE)
		1	1		D2989-043	BASKET LID ASSEMBLY (INSIDE)
	1				D350-607-141	AUTOMATIC LID OPENER INSTL
			1		D350-607-143	AUTOMATIC LID OPENER INSTL
2	2	2	2		AN3-16A	BOLT
2	2				AN4-7A	BOLT
5	5	5	5	DS1	AN4-12A	BOLT
		2	2		AN4-13A	BOLT
				(5) 8 DS1	AN4-15A	BOLT
1		7	5		AN4-22A	BOLT
1					AN4-24A	BOLT
4	4	4	4		AN5-17A	BOLT
2	2	2	2		MS20600AD4W3	RIVET (OR CR9163-4-3)
12	12	24	24	16	NAS1149D0463J	WASHER (OR AN960JD416)
2		2			NAS1149D0416J	WASHER (OR AN960JD416L)
4	4	4	4		NAS1149D0563J	WASHER (OR AN960JD516)
2	2	2	2		NAS1149DN832J	WASHER (AN960JD8)
		2	2		NAS1515H4	WASHER
4		4			AN970-4	WASHER
2	2	2	2		MS21042L3	NUT (OR MS21042-3)
9	7	14	12	(13) 8 DS1	MS21042L4	NUT (OR MS21042-4)
4	4	4	4		MS21042L5	NUT (OR MS21042-5)

REFERENCE ONLY

7 deadly wastes

- 1. Overproduction**
- 2. Rework**
- 3. Transportation**
- 4. Inappropriate / over Processing**
- 5. Unnecessary Inventory**
- 6. Delays / Waiting**
- 7. Unnecessary Motions**

6.2 D350-607-045/-045A/-047/-047A HELI-UTILITY-BASKET™

Qty -045	Qty -045A	Qty -047	Qty -047A	Qty -241	Part Number	Description
X					D350-607-045	HELI-UTILITY-BASKET
	X				D350-607-045A	HELI-UTILITY-BASKET
		X			D350-607-047	HELI-UTILITY-BASKET
			X		D350-607-047A	HELI-UTILITY-BASKET
1	1	1	1	X	D350-607-241	BASKET CLAMP KIT INSTALLATION
2	2	5	5		D2022-101	SPACER
				4	D2230-1	LUG
				4	D2230-3	CLAMP
1	1	1	1		D2258-200	LABEL
1	1	1	1		D2324	STRUT
1		1			D2332-041	PROP ASSEMBLY
1	1	1	1		D2530	HANDLE WELDMENT
2	2	2	2		D2535	SPRING
2	2	2	2		D2537	BUSHING
				8	D2732-030	RUBBER CUSHION
2	2	2	2		D2931	BUMPER
1	1	1	1		D3265-041	BASKET BASE ASSEMBLY
1	1				D3266-041	BASKET LID ASSEMBLY
		1	1		D3267-041	BASKET LID (OUTSIDE)
		1	1		D3267-043	BASKET LID (INSIDE)
			1		D350-607-143	AUTOMATIC LID OPENER INSTL
	1				D350-607-145	AUTOMATIC LID OPENER INSTL
2	2	2	2		AN3-16A	BOLT
2	2				AN4-7A	BOLT
5	5	5	5		AN4-12A	BOLT
		2	2		AN4-13A	BOLT
				8	AN4-15A	BOLT
1		7	5		AN4-22A	BOLT
1					AN4-24A	BOLT
4	4	4	4		AN5-17A	BOLT
2	2	2	2		MS20600AD4W3	RIVET (OR CR9163-4-3)
12	12	24	24	16	NAS1149D0463J	WASHER (OR AN960JD416)
2		2			NAS1149D0416J	WASHER (OR AN960JD416L)
4	4	4	4		NAS1149D0563J	WASHER (OR AN960JD516)
2	2	2	2		NAS1149DN832J	WASHER (AN960JD8)
		2	2		NAS1515H4	WASHER
4		4			AN970-4	WASHER
2	2	2	2		MS21042L3	NUT (OR MS21042-3)
9	7	14	12	8	MS21042L4	NUT (OR MS21042-4)
4	4	4	4		MS21042L5	NUT (OR MS21042-5)

REFERENCE ONLY



The value adding parts of the process are obvious, so companies mistakenly focus on trying to make them go faster. The waste is not obvious, so it is not addressed. Lean focuses on eliminating the waste.

Lean is ongoing, there is no end to the search for waste!

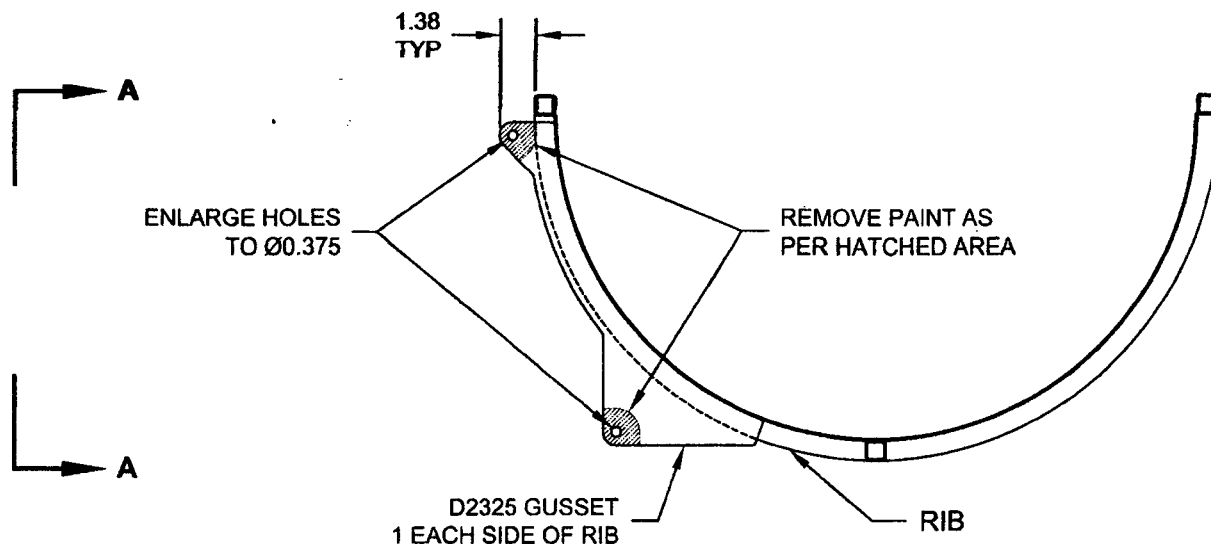
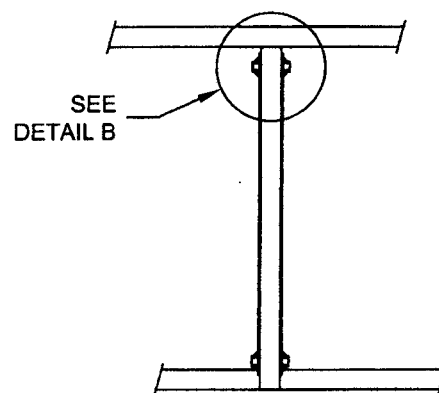
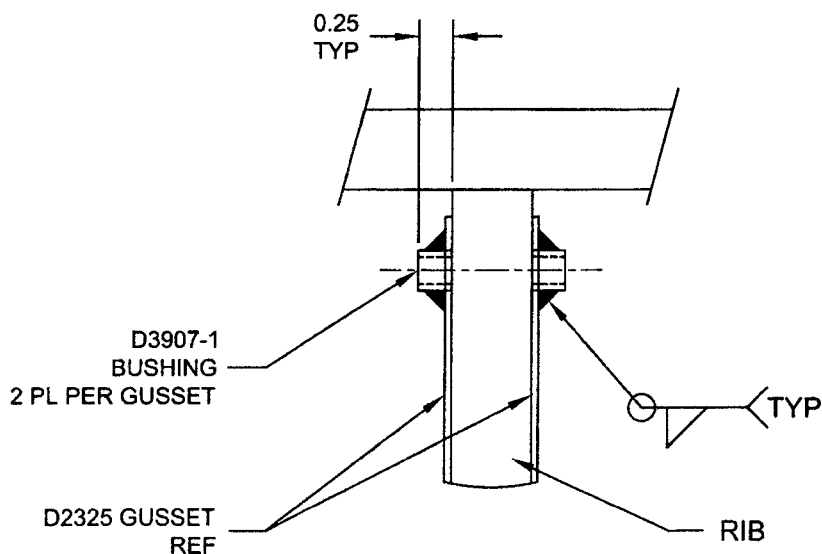


FIGURE 1: WELDING PREPARATION

REFERENCE ONLY



**VIEW A-A: BUSHING
INSTALLATION**



DETAIL B

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 09.03.11

CERT. NO.: SH94-14

ISSUE NO.: 4

DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	ADS		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9356	SHEET 2 OF 2
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	ELONGATED HOLE REPAIR KIT	NTS
DATE	09.03.11	COPYRIGHT © 2006 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	

5S continued...

- **Standardize (Seiketsu) (清潔):** Standardizing. This refers to standardized work practices. This means operating in a consistent and standardized fashion. Everyone knows exactly what his or her responsibilities are.
- **Sustain (Shitsuke) (躰):** Sustaining. Refers to maintaining and reviewing standards. Once the previous 4S's have been established they become the new way to operate. Maintain the focus on this new way of operating, and do not allow a gradual decline back to the old ways of operating.

DART SERVICE INSTRUCTION

TO AMEND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-607

REF, CANADIAN STC: SH94-14

FAA STC: SR00213NY

EASA STC: EASA.I.R.M.S.1405

IN CASES WHERE THE MOUNTING HOLES AT THE BASE OF THE D350-607-041/-043/-045/-047 BASKET ARE ELONGATED DUE TO WEAR OR DAMAGE, IT IS ACCEPTABLE TO REPAIR THE HOLES WITH THE FOLLOWING REPAIR PROCEDURE:

REPAIR PROCEDURE:

- 1) ENLARGE THE INSTALLATION HOLES ON THE D2325 GUSSETS PER FIGURE 1 AND DEBURR SHARP EDGES.
- 2) INSTALL THE D3907-1 BUSHING BY T.I.G WELDING PER MIL-STD-2219/AMS-STD-2219 CLASS "C" USING ER308L FILLER ROD AS SHOWN IN DETAIL B.
- 3) TOUCH UP PAINT IN ACCORDANCE WITH ICA-D350-607.
- 4) RE-INSTALL THE BASKET IN ACCORDANCE WITH ICA-D350-607 SUBSTITUTING THE INSTALLATION HARDWARE PER TABLE 1.

TABLE 1

BOLT			QUICK RELEASE PIN		
EXISTING	REPLACEMENT	QTY	EXISTING	REPLACEMENT	QTY
AN4-12A	AN4-15A	4	BLRS-010	BLRS-020	4

PARTS LIST

ITEM	QTY -011	PART NUMBER	DESCRIPTION
	X	DSI 9356-011	BASKET REPAIR KIT
1	8	D3907-1	BUSHING
7	4	AN4-15A	BOLT
8	4	BLRS-020	QUICK RELEASE PIN

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: 
D. SHEPHERD (DE # 02)

DATE: 09.03.11
CERT. NO.: SH94-14
ISSUE NO.: 4

B	DSI UPDATED TO MAKE DSI INTO KIT AS WELL AS REPAIR INSTRUCTIONS. TITLE UPDATED. SEE NCR 09-036 FOR DETAILS.		AJS	09.03.11
A	NEW ISSUE		MB	06.09.28
REV.	DESCRIPTION		BY	DATE
DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN	AJS			
CHECKED		DRAWING NO.	REV. B	
MFG. APPR.	N/A	DSI 9356	SHEET 1 OF 2	
APPROVED		TITLE	SCALE	
DE APPR.		ELONGATED HOLE REPAIR KIT	NTS	
DATE	09.03.11		COPYRIGHT © 2006 BY DART AEROSPACE LTD	
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REFERENCE ONLY

5S basics

- **Sort (Seiri) (整理):** Sorting. Refers to the practice of going through all the tools, materials, etc., in the work area and keeping only essential items. Everything else is stored or discarded. This leads to fewer hazards and less clutter to interfere with productive work.
- **Set in order (Seiton) (整頓):** Simplifying. Focuses on the need for an orderly workplace. "Orderly" in this sense means arranging the tools and equipment in an order that promotes work flow. Tools and equipment should be kept where they will be used, and the process should be ordered in a manner that eliminates extra motion.
- **Shine (Seiso) (清掃):** Sweeping, Systematic Cleaning, or Shining. Indicates the need to keep the workplace clean as well as neat. At the end of each shift, the work area is cleaned up and everything is restored to its place. The key point is that maintaining cleanliness should be part of the daily work - not an occasional activity initiated when things get too messy.